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LFW

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
for FY 2006

SEP 2 1 2006

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT | ($) *130.00*

Complete if Known	
Application Number	10/518,997
Filing Date	December 21, 2004
First Named Inventor	Junbiao Zhang
Examiner Name	Jean B. Corrielus
Art Unit	2611
Attorney Docket No.	PU020309

METHOD OF PAYMENT (check all that apply)   **CUSTOMER NUMBER: 24498**

☐ Check   ☐ Credit card   ☐ Money Order   ☐ None   ☐ Other (please identify): _____

☒ Deposit Account: Deposit Account Number 07-0832   Deposit Account Name: **THOMSON LICENSING INC.**

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FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES	Small Entity	SEARCH FEES	Small Entity	EXAMINATION FEES	Small Entity	
Application Type	**Fee ($)**	**Fee ($)**	**Fee ($)**	**Fee ($)**	**Fee ($)**	**Fee ($)**	**Fees Paid ($)**
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description		Fee ($)	Small Entity Fee ($)
Each claim over 20 (including Reissues)		50	25
Each independent claim over 3 (including Reissues)		200	100
Multiple dependent claims		360	180

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)	Multiple Dependent Claims	
				Fee ($)	**Fee Paid ($)**
_____ - 20 or HP =	_____ x	_____ =	_____	_____	_____

HP = highest number of total claims paid for, if greater than 20.

Independent Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 3 or HP =	_____ x	_____ =	_____

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

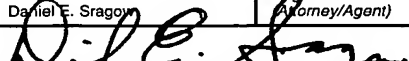| Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee ($)	Fee Paid ($)
_____ - 100 =	_____ / 50 =	_____ (round up to a whole number) x	_____ =	_____

4. OTHER FEE(S)

Fees Paid ($)

Non-English Specification, $130 fee (no small entity discount)

Other (e.g., late filing surcharge): Petition Fee set forth in 37 CFR 1.17(h)   130.00

SUBMITTED BY

Name (Print/Type)	Daniel E. Sragow	Registration No. (Attorney/Agent)	22,856	Telephone	609-734-6832
Signature					

Ser. No. 10/518,997   PU020309

Customer No. 24498

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant   :   Junbiao Zhang et al.

Serial No.   :   10/518,997

Filed   :   December 21, 2004

For   :   EVER-INCREASING QUALITY FOR STORED VIDEO
                          STREAMING IN A MOBILE WIRELESS INTERWORKING
                          ENVIRONMENT

Examiner   :   Jean B. Corrielus

Art Unit   :   2611

PETITION TO WITHDRAW AN APPLICATION FROM ISSUE

UNDER 37 CFR 1.313(a)

Mail Stop Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This Petition is responsive to the Office Communication dated 29 June 2006,

which was attached to the Notice of Allowance dated 3 July 2006. The Petition Fee is

being paid by the attached Fee Transmittal.

The Applicants can not agree with the Examiner's holding that the disclosure

of application number 60/390,841 fails to provide adequate support or enablement, in

the manner provided by the first paragraph of 35 U.S.C. 112, for one or more claims

of this application. The Applicants submit that the Examiner has committed error in

denying the claimed priority of provisional application serial number 60/390,841.

CERTIFICATE OF MAILING

I hereby certify that this amendment is being deposited with the United States
Postal Service as First Class Mail, postage prepaid, in an envelope addressed to
Commissioner for Patents, Box 1450, Alexandria, Virginia 22313-1450 on:

9-19-06   Karen Schlauch
_____   _____
Date

The Applicants point out that the issue of adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C 112 was first raised in the Office Action which accompanied the Notice of Allowance. The Applicants have not previously had an opportunity to present their arguments on this issue.

The Applicants submit that withdrawal from issue is necessary to allow the Office to fully consider the arguments of the Applicants as to why the Examiner's denial of priority of the provisional application is error. If this petition is not granted, the final fee will have to be paid by 3 October 2006. The issue may not be resolved by that date.

ALLOWED CLAIMS

The Applicants set forth the claims which have been allowed by the Examiner, together with an explanation of where in the priority document each recitation is to be found:

ALLOWED CLAIMS	PROVISIONAL APP. SER. NO. 60/390,841
1. A method for downloading and displaying a program using a mobile terminal in an interworking environment	Page 1, lines 4, 7 and 8
that includes a first radio access network having a first data transfer rate	Page 1, line 15
and a second radio access network having a second data transfer rate that is faster than the first data transfer rate	Page 1, lines 15 and 16
downloading via the first or second radio access networks, a layer of the video program encoded into multiple layers	Page 2, line 18
the video program being downloaded at the second data transfer rate when the mobile terminal is in the coverage area of the second radio access network	Page 1, lines 10 and 11
displaying the downloaded video program at a playback rate that corresponds to a display quality	Page 1, lines 11 and 12
buffering excess portions of the downloaded program that result when a rate at which the video program is being downloaded exceeds a rate at which the video program is displayed	Page 1, lines 31-33
increasing the number of layers being downloaded	Page 2, lines 22-23
and playback rate at which the video program is displayed	Page 2, line 23
to thereby increase the display quality	Page 2, line 27

when the buffered excess portions of the downloaded program exceed a threshold level.	Page 2, lines 21-23. As soon as the downloaded amount can make R_P safely jump to $R_K + \Delta R_K$, the MT starts downloading the next layer and the playback rate is upgraded to $R_K + \Delta R_K$.

ALLOWED CLAIMS	PROVISIONAL APP. SER. NO. 60/390,841
2. The method of Claim 1 wherein the threshold level corresponds to a time duration of a remainder of the program to be played back multiplied by a difference between a current playback rate and the first data transfer rate.	Page 1, line 47
3. The method of Claim 1 where the increasing step comprises a step of limiting the playback rate to a maximum value that is equal to a sum of the first data transfer rate and a quotient resulting from dividing the buffered excess portions of the downloaded program by a time duration of the remainder of the program to be played back.	Page 2, line 10
4. The method of Claim 1 wherein the increasing step comprises increasing the playback rate by an amount that corresponds to the number of layers being downloaded such that each additional layer being downloaded results in an incremental change to the playback rate.	Page 2, lines 18-24
5. The method of Claim 1 further comprising the step of continuing to download the program from the first radio access network while maintaining a last playback rate from the second radio access network for a duration of playing back the program when the mobile terminal is again within the coverage area of the first radio access network.	Page 1, starting on line 49, explains that once the video quality (playback rate) is increased, such playback rate will not fall back for the rest of the video session even if the mobile terminal is moved back into lower rate coverage.
6. The method of Claim 1 further comprising the step of maintaining a last playback rate from the second radio access network for a duration of playing back of the layered media when the mobile terminal is again within the	Page 2, starting on line 12, explains that with more downloading the playback rate can be safely upgraded more. Once upgraded, the rate will not drop even if the mobile terminal moves out of the WLAN cell immediately after the

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| coverage area of the first radio access network and the entire program has to be completely downloaded. | upgrade and remains in the 3G coverage for the rest of the session when the entire program has been completely downloaded. |

ALLOWED CLAIMS	PROVISIONAL APP. SER. NO. 60/390,841
7. The method of Claim 1 wherein the increasing step comprises the step of transmitting to a source of the program a request to increase the number of layers being transmitted.	Page 2, lines 22 and 23 states that as soon as the downloaded amount can make R_P safely jump to $R_K + \Delta R_K$, the mobile terminal starts downloading the next layer and the playback rate is upgraded.
8. The method of Claim 1 wherein the first radio access network is a 3G network	Page 1, line 6 refers to a 3G cellular network as radio A.
and the second radio access network is a wired local area network (WLAN).	Page 1, line 9 indicates that WLAN is radio B.
9. A mobile terminal for downloading and displaying a video program in an interworking environment	Page 1, line 4
that includes a first radio access network having a first data transfer rate	Page 1, line 1
and a second radio access network having a second data transfer rate that is faster than the first data transfer rate	Page 1, line 5
the mobile terminal comprising a receiver for downloading via the first or second radio access networks, a layer of the video program encoded into multiple layers	Page 2, line 18
the video program being downloaded at the faster data transfer rate when the mobile terminal is in the coverage area of the second radio access network	Page 1, lines 49 and 50
a display for displaying the downloaded video program at a playback rate that corresponds to a display quality	Use of a display is described on page 1, lines 22-27.
a memory device for buffering excess portions of the downloaded program that result when a rate at which the program is being downloaded exceeds a rate at which the video program is displayed	A buffered memory device is described on page 1, lines 31-33
a processor coupled to the receiver display and memory device for increasing the number of layers being downloaded	Page 2, lines 18-23 discusses increasing the number of layers being downloaded.

and the playback rate at which the program is displayed to increase the display quality	Page 2, line 23

ALLOWED CLAIMS	PROVISIONAL APP. SER. NO. 60/390,841
When the buffered excess portions of the downloaded program exceeds a threshold level	Page 2, lines 20-23 indicates that the mobile terminal affects the downloaded amount and the residual time of the video session to upgrade the playback rate. The threshold level is that which allows the playback rate to safely jump to $R_K + \Delta R_K$.
10. The mobile terminal of Claim 9 wherein the threshold level corresponds to a time duration of a remainder of the video program to be played back multiplied by a difference between the playback rate and the first data transfer rate.	Page 1, line 46
11. The mobile terminal of Claim 9 wherein the processor limits the playback rate to a maximum value that is equal to a sum of the first data transfer rate and a quotient resulting from dividing the buffered excess portions of the downloaded program by a time duration of the remainder of the program to be played back.	Page 2, line 10
12. The mobile terminal of Claim 9 wherein the processor increases the playback rate by an amount that corresponds to a number of layers being downloaded such that each additional layer being downloaded results in an incremental change to the playback rate.	Page 2, lines 20-23
13. The mobile terminal of Claim 9 wherein the receiver continues to download the program from the first radio access network while the processor maintains a last playback rate from the second radio access network for a duration of playing back the program when the mobile terminal is again within a coverage area of the first radio access	Starting on page 1, line 49 the provisional application teaches that once the playback rate is increased, it will not fall back for the remainder of the video session even if the mobile terminal moves back into a lower rate area of coverage. The provisional application continues to discuss how the amount of information in the buffer allows playback at the higher

	rate, even when the mobile terminal returns to a coverage area of the lower rate network. See specifically page 2, lines 12-14.
network.	

ALLOWED CLAIMS	PROVISIONAL APP. SER. NO. 60/390,841
14. The mobile terminal of Claim 9 wherein the processor maintains a last playback rate from the second radio access network for a duration of playing back the layered media when the mobile terminal is again within a coverage area of the first radio access network and the program has been completely downloaded.	Page 2, lines 20-24
15. The mobile terminal of Claim 9 further comprising a transmitter for transmitting to a source of the program a request to increase the number of layers being transmitted in response to a command issued by the processor.	Page 2, lines 18-24 discusses the mobile terminal, when downloading in a WLAN cell, checking the downloaded amount and the residual time of the video session. As soon as the downloaded amount can make R_P safely jump to $R_K + \Delta R_K$, the mobile terminal starts downloading the next layer and the playback rate is upgraded to $R_K + \Delta R_K$. It is inherent that in order for such an upgraded download amount to take place, the mobile terminal must transmit a request to the source to increase the number of layers being transmitted.
16. The mobile terminal of Claim 10 wherein the first radio access network is a 3G cellular network.	Page 1, line 6
and the second radio access network is a wireless local area network (WLAN).	Page 1, lines 8 and 9
17. A method for downloading and displaying a video program using a mobile device in an inter networking environment	Page 1, line 4
that includes a first radio access network having a first data transfer rate and a second radio access network having a second data transfer rate that is faster than the first data transfer rate	Page 1, lines 4-7

the method comprising the steps of downloading via the first or second radio access networks	Page 1, lines 31-33

ALLOWED CLAIMS	PROVISIONAL APP. SER. NO. 60/390,841
a layer of the video program encoded into multiple layers	Page 2, line 18
the video program being downloaded at the faster data transfer rate when the mobile terminal is in the coverage area of the second radio access network	Page 1, lines 10-13
displaying the downloaded video program at a playback rate that corresponds to a display quality	Page 1, line 27
downloading a current layer and a next layer of the video program at the same time when the mobile terminal enters the coverage area of the second radio access network	Page 2, lines 22-24
increasing the playback rate at which the video program is displayed to increase the display quality when the next layer has been completely downloaded	Page 2, lines 23 and 24
18. The method of Claim 17 wherein the multiple layers comprise a base layer and at least one subsequent layer	Page 2, lines 18 and 19
each of the at least one subsequent layer being associated with an incremental change to the playback rate	Page 2, lines 22-23
And wherein said increasing step increases the playback rate by an amount that corresponds to the next layer	Page 2, lines 22-23
19. The method of Claim 17 further comprising the step of continuing to download the video program from the first radio access network while maintaining a last playback rate from the second radio access network for a duration of playing back the video program when the mobile terminal is again within the coverage area of the first	Page 1, line 49; Page 2, line 1

radio access network.	
20. The method of Claim 17 further comprising the step of maintaining a last playback rate from the second radio access network for a duration of playing back the layered media when the mobile terminal is again within the coverage area of the first radio access network and the entire video program has been completely downloaded.	Page 2, lines 6-14

ALLOWED CLAIMS	PROVISIONAL APP. SER. NO. 60/390,841
21. The method of Claim 17 wherein the second downloading step comprises downloading the next layer starting from a current playback point.	The paragraph on page 2, starting on line 18 indicates that the mobile terminal checks the downloaded amount and the residual time of the video session as soon as the downloaded amount can make R_P safely jump to R_K & ΔR_K. The mobile terminal then starts downloading the next layer and the playback rate is upgraded to $R_K + \Delta R_K$. Note that the downloading step starts from a current playback point.
22. The method of Claim 19 wherein the first radio access network is a 3G cellular network and the second radio access network is a wireless local area network (WLAN).	Page 1, lines 8 and 9
23. A mobile terminal for downloading and displaying a video program in an interworking environment.	Page 1, line 4
that includes a first radio access network having a first data transfer rate, a second radio access network having a second data transfer rate that is faster than the first data transfer rate	Page 1, lines 4-6
the mobile terminal comprising a receiver for downloading via the first or second radio access network a layer of the video program encoded into multiple layers	Page 2, lines 18 and 19
the video program being downloaded at a faster data transfer rate when the mobile terminal is in the coverage area of the second radio access network	Page 1, lines 31-33
the receiver downloading a current layer and a next layer of the video program at the same time when the mobile terminal enters the coverage area of the second radio access network even if a preceding	Page 2, lines 18-24

layer of the video program is still being downloaded	
a display for displaying the downloaded video program at a playback rate that corresponds to a display quality	Page 1, line 12
and a processor coupled to the receiver and display for increasing the playback rate at which the video program is displayed to thereby increase the display quality when the next layer has been completely downloaded	Page 2, line 23

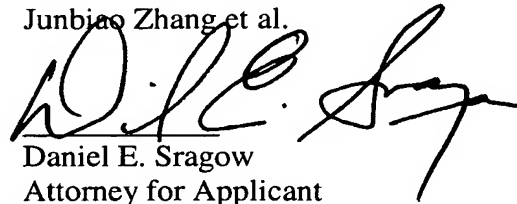| ALLOWED CLAIMS	PROVISIONAL APP. SER. NO. 60/390,841
24. The mobile terminal of Claim 23 wherein the multiple layers comprise a base layer and at least one subsequent layer	Page 2, lines 16-18
each of the at least one subsequent layer being associated with an incremental change to the playback rate	Page 2, line 19
and wherein the display increases the playback rate by an amount that corresponds to the next layer	Page 2, lines 22 and 23
25. The mobile terminal of Claim 23 wherein the processor maintains a last playback rate from the second radio access network for a duration of playing back the video program and the mobile terminal is again with a coverage area of the first radio access network	Page 2, lines 20-24
26. The mobile terminal of Claim 23 wherein the processor maintains a last playback rate from the second radio access network for a duration of playing back the layered media when the mobile terminal is again within a coverage area of the first radio access network and the entire video program has been completely downloaded.	Page 2, lines 22-24
27. The mobile terminal of Claim 23 wherein the receiver downloads the next layer of the video program starting from a current playback point.	Page 2, lines 20, 23
28. The mobile terminal of Claim 23 wherein the first radio access network is a 3G cellular network and the second radio access network is a wireless local area network (WLAN).	Page 1, lines 8-10

The Applicants submit that Provisional Application 60/390,841 provides adequate support and enablement under 35 USC 112 for all of the allowed claims, and that Applicants' claim for priority should be accepted.

Respectfully submitted,

Junbiao Zhang et al.

Daniel E. Sragow
Attorney for Applicant
Registration No. 22,856
609-734-6832

THOMSON Licensing Inc.
Patent Operation
PO Box 5312
Princeton, NJ 08543-5312

Date: 19 September 2006

DES/kms